

## *San Joaquin Valley Unified Air Pollution Control District*

**PERMIT UNIT:** N-823-4-1

**EXPIRATION DATE:** 9/30/2001

**EQUIPMENT DESCRIPTION:**

325 HP CATERPILLAR D353 DIESEL ENGINE #2 POWERING PUMP # P-26.

### **Permit Unit Requirements**

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1. Sulfur compound emissions shall not exceed 0.2% by volume, 2000 ppmv, on a dry basis averaged over 15 consecutive minutes. [Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
2. Particulate matter emissions shall not exceed in concentration at the point of discharge 0.1 gr./dscf. [District Rule 4201; Rule 402 (Madera) and 404 (all 7 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
3. Unit shall be fired only on diesel fuel with a sulfur content of less than 0.05% by weight. [NSR, Rule 404 (Madera), 406 (Fresno) and 407 (6 remaining counties in the San Joaquin Valley)] Federally Enforceable Through Title V Permit
4. If the IC engine is fired on Air Resources Board regulated diesel fuel, with a supplier certified sulfur content of less than 0.05% by weight, the operator shall maintain copies of all fuel invoices and supplier certifications. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
5. If the IC engine is not fired on ARB regulated diesel fuel, with a supplier certified sulfur content of less than 0.05% by weight, then the owner or operator shall determine the sulfur content of each delivery of diesel fuel being fired in the IC engine. The sulfur content shall be determined using ASTM method D 2880-71. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
6. Records of operating hours shall be kept for units operating less than 200 hours per year. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit
7. On all units which are not emergency or backup IC engines operating less than 200 hours per year, operators shall perform a source test for particulate emissions within 6 months of the initial Title V permit issuance. A source test for particulate emissions conducted within the 24 months prior to permit issuance shall be considered compliance with this requirement. Source testing for

particulate matter shall be performed according to EPA Method 5, stack gas velocity by EPA Method 2, and the stack gas moisture content by EPA Method 4. If the initial PM test result is less than or equal to 0.06 gr./dscf, then testing shall occur not less than once every 5 years. Otherwise testing shall occur not less than once every 24 months. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

8. Test results from an engine that represents a group of engines in terms of rated brake horsepower, engine make and series, operational conditions, fuel used, and control method, shall satisfy testing requirements provided this group of engines is owned and operated by a single owner/operator. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

9. The operator of an internal combustion (IC) engine shall maintain all records of required monitoring data and support information for inspection at any time for a period of five years. [District Rule 2520, 9.5.2] Federally Enforceable Through Title V Permit

10. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following applicable requirements of SJVUAPCD Rule 4201; Rule 404 (Madera), 406 (Fresno), and 407 (Kings, Merced, San Joaquin, Tulare, Kern, and Stanislaus). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

11. Compliance with permit conditions in the Title V permit shall be deemed compliance with the following subsumed requirements: Rules 402 (Madera) and 404 (Fresno, Merced, Kern, Kings, San Joaquin, Stanislaus, Tulare). A permit shield is granted from these requirements. [District Rule 2520, 13.2] Federally Enforceable Through Title V Permit

12. The engine shall be operated with the timing retarded four degrees from the manufacturer's standard recommended timing. The engine shall be tuned at least annually by a mechanic. During the annual tune-up, the mechanic shall certify the timing retarding, by completing and signing the District IC Engine Timing Certification Form. Records of tune-ups, maintenance, and certifications shall be maintained for a period of at least 5 years. [District NSR Rule and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

13. Operation of this engine shall be limited to 1,800 hours for the first calendar quarter, 1,820 hours for the second calendar quarter, and 1,840 hours for each of the third and fourth calendar quarters. [District NSR Rule] Federally Enforceable Through Title V Permit

14. The Nox emissions from this engine shall not exceed 240.5 lb in any one day. Compliance shall be demonstrated by source testing every 24 months,

using EPA Method 7E or ARB Method 100. An initial source test for Nox shall be performed within 6 months of initial Title V permit issuance, unless a source test was conducted within the 24 months prior to permit issuance. [District NSR Rule and District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

15. This engine shall comply with Rule 4701 (Internal Combustion Engines). [District Rule 4701]

16. All required source testing shall conform to the compliance testing procedures described in District Rule 1081 (last amended December 19, 1993). [District Rule 1081, and San Joaquin County Rule 108.1] Federally Enforceable Through Title V Permit

17. A log of the engine operating hours shall be kept on the premises at all times and shall be made available for District inspection upon request. [District NSR Rule] Federally Enforceable Through Title V Permit

18. A record of daily fuel consumption shall be maintained, retained on the premises. [District NSR Rule] Federally Enforceable Through Title V Permit

19. The following conditions must be met for representative unit(s) to be used to demonstrate compliance for pollutant limits for a group of units: 1) all units are initially source tested and emissions from each unit in group are less than 90% of the permitted value and vary 25% or less from the average of all runs, 2) all units in the group are similar in terms of rated brake horsepower, make and series, operational conditions, fuel used, and control method, 3) the group is owned by a single owner and located at a single stationary source, and 4) the selection of the representative unit(s) is approved by the APCO prior to testing. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

20. The representative unit source tested to demonstrate compliance shall be rotated, so that when 2 annual source test cycles have been completed, both units (N-823-1 and N-823-2) will have been tested. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

21. All units in a group for which representative units are annually source tested to demonstrate compliance for emission limits of this permit shall have received the same maintenance and tune-up procedures as the representative unit(s). [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

22. An engine operating log shall be maintained for the each unit of the group. The log shall include, on a monthly basis, the total hours of operation, type and quantity of fuel used, and preventative and corrective maintenance and modifications performed. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

23. Should any of the representative units exceed the required emission limits of this permit, each of the units in the group shall demonstrate compliance by emissions testing within 90 days of the failed test. (This requirement shall not supersede a more stringent NSR or PSD permit testing requirement.) [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

24. Compliance with Daily Emission Limits (DELs) shall be determined, during source testing, by using the arithmetic mean, pursuant to District Rule 1081, of 3 forty-minute test runs for Nox. This mean shall be multiplied by "36" to determine compliance with the 24 hour DEL. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

25. The permittee shall inspect the engine exhaust stack weekly for excessive visible emissions. The inspection shall include verifying the engine is performing normal, designed functions and is being operated according to standard procedures, and per the manufacturer's recommendations. If the equipment is not performing according to design and procedures or if excessive visible emissions are observed from the exhaust stack, the permittee shall take corrective action within 24 hours. If excessive visible emission cannot be corrected within 24 hours, EPA Method 9, except for data reduction (section 2.5), shall be conducted to determine compliance with the 20% facility-wide opacity limit. [District Rule 2520, 9.4.2] Federally Enforceable Through Title V Permit

26. The permittee shall maintain the following records with regards to weekly visible emission/equipment inspections: 1) date and time of inspection, 2) stack or emission point identification, 3) operational status/conditions of the equipment, 4) observed results and conclusions, 5) description of corrective actions taken to resolve any observed excessive visible emissions, 6) date and time excessive visible emissions corrected, 7) date of Method 9 test and results if corrected, and 8) name of person(s) performing the inspection. [District Rule 25 20, 9.4.2] Federally Enforceable Through Title V Permit

27. No air contaminant shall be released into the atmosphere which causes a public nuisance. [District Rule 4102]